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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Karl-Erik Neumann

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EXAMINER

FERGUSON, MICHAEL P

ART UNIT

PAPER NUMBER

3679

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/573,515	Applicant(s) NEUMANN, KARL-ERIK	
	Examiner MICHAEL P. FERGUSON	Art Unit 3679	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11 February 2008.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-4 and 6-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4 and 6-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 March 2006 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Information Disclosure Statement

1. The listing of references in the specification is not a proper information disclosure statement. 37 CFR 1.98(b) requires a list of all patents, publications, or other information submitted for consideration by the Office, and MPEP § 609.04(a) states, "the list may not be incorporated into the specification but must be submitted in a separate paper." Therefore, unless the references have been cited by the examiner on form PTO-892, they have not been considered.

Drawings

2. The drawings are objected to because of the following:

The cross-hatching of elements **22** and the other unlabeled elements with the same cross-hatching, in Figures 3, 5, 7, 9, 11 and 13, is improper based on the material of such elements.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering

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of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The disclosure is objected to because of the following informalities:

In the specification, page 2, lines 17-19, recites "These objects are fulfilled... as defined in the independent claim... from the accompanying dependent claims. ". Such lines should be deleted.

Appropriate correction is required.

Claim Objections

4. Claims 1, 2, 6 and 7 are objected to because of the following informalities:

Claim 1 (line 5) recites "wobbler, is, in turn, mounted". It should recite --wobbler is mounted--.

Claim 1 (line 6) recites "the setting-device bearing means". It should recite --a setting device bearing means--.

Claim 2 (line 3) recites "setting device or a frame". It should recite --setting device and a frame--.

Claim 2 (line 5) recites "which, in turn, is". It should recite --which is--.

Claim 6 (line 1) recites "to claim 1". It should recite --to claim 2--.

Claim 7 (line 1) recites "to claim 1". It should recite --to claim 2--.

For the purpose of examining the application, it is assumed that appropriate correction has been made.

Claim Rejections - 35 USC § 112

5. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

6. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 (lines 1-4) recites "A joint of a kinematic machine for connection to a machine setting device mounted in the parallel-kinematical machine, wherein the setting device is adapted to move a machine-connected positioning head in space, characterized in that the setting device is mounted about a wobbler". It is unclear as to what is positively claimed as the invention, as claim 1 fails to positively claim any structural and/or functional limitation of the claimed joint. All of the limitations of claim 1 are recited as only intended use with the claimed joint, without positively setting forth what structurally constitutes the joint, or what elements the claimed joint comprises. Claims 2-4 and 6-9 depend from claim 1 and are likewise rejected.

Claim 1 (lines 1-4) should recite --A joint of a kinematic machine for connection to a machine setting device mounted in the parallel-kinematical machine, the joint comprising a setting device adapted to move a machine-connected positioning head in space, characterized in that the setting device is mounted about a wobbler--. For the

purpose of examining the application, it is assumed that appropriate correction has been made.

7. Claim 9 (lines 2-3) recites the limitations "the angle α ", "the supporting shaft" and "the frame". There is insufficient antecedent basis for these limitations in the claim.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-4 and 6-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Hulsebos (GB 252,499).

As to claim 1, Hulsebos discloses a joint of a kinematic machine (knobs **5,6** of setting device **4,5,6** rotate about wobbler **1c,3** at parallel locations relative to the axis of rotation, thus constituting a parallel-kinematic machine) for connection to a machine setting device mounted in the parallel-kinematic machine, the joint comprising a setting device **4,5,6** capable of moving a machine-connected positioning head in space (a machine-connected positioning head is constituted by the frame mounts or element driven by shaft **1** within the engine, pump or compressor; page 1 lines 8-12, page 2 lines 81-97), characterized in that the setting device is mounted about a wobbler **1c,3** for rotation about a wobbler axis wherein the wobbler is mounted for rotation about a main axis that extends through a setting-device bearing means **9,11,12** around the

wobbler, wherein the wobbler includes an external bearing mounting surface or an external bearing surface on which the setting device is mounted (Figure 2).

As to claim 2, Hulsebos discloses a joint characterized in that the joint is disposed between the setting device **4,5,6** and the machine-connected positioning head or, alternatively, between the setting device and a frame (a frame is constituted by the frame mounts or element driven by shaft **1** within the engine, pump or compressor; page 1 lines 8-12, page 2 lines 81-97), wherein one end of the setting device is mounted for rotation about the wobbler **1c,3** which is rotatably mounted to the machine-connected positioning head and/or to the frame or both for rotation about the main axis (Figure 2).

As to claim 3, Hulsebos discloses a joint characterized in that the wobbler axis and the main axis mutually intersect at an angle α , where $1^\circ \leq \alpha \leq 45^\circ$ (Figure 2).

As to claim 4, Hulsebos discloses a joint characterized in that the wobbler axis and the main axis mutually intersect at an angle α , where $5^\circ \leq \alpha \leq 20^\circ$ (Figure 2).

As to claim 6, Hulsebos discloses a joint characterized in that the wobbler **1c,3** is firmly connected to a supporting shaft **1** which has two ends that are rotatably connected to the positioning head and/or the frame (Figure 2).

As to claim 7, Hulsebos discloses a joint characterized in that the wobbler **4,5,6** is rotatably connected to a supporting shaft **1** which includes two ends of which at least one end is connected to the positioning head and/or the frame (Figure 2).

As to claim 8, Hulsebos discloses a joint characterized in that one end of the supporting shaft **1** is inserted in a first joint mounting means which is secured axially by

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a clamp coupling (not shown; inherently, shaft **1** is axially secured by a clamp coupling defining joint mounting means to frame mounts or an element driven by the shaft within the engine, pump or compressor; page 1 lines 8-12, page 2 lines 81-97); and in that the other end of the supporting shaft is firmly connected to a second joint mounting means (not shown; inherently, shaft **1** is axially secured by a joint mounting means to frame mounts or an element driven by the shaft within the engine, pump or compressor; page 1 lines 8-12, page 2 lines 81-97).

As to claim 9, Hulsebos discloses a joint characterized in that an angle α is orientated in relation to the supporting shaft **1** when the setting device **4,5,6** is fitted to the positioning head and/or the frame, so as to permit tilting between the setting device and the wobbler **1c,3** by a rotation of the wobbler about the main axis (Figure 2).

Response to Arguments

10. Applicant's arguments filed February 11, 2008 have been fully considered but they are not persuasive.

As to claim 1, Attorney argues that:

Hulsebos does not disclose a joint of a parallel-kinematic machine wherein the wobbler includes an external bearing mounting surface or an external bearing surface on which the setting device is mounted.

Examiner disagrees. As to claim 1, Hulsebos discloses a joint of a parallel-kinematic machine (knobs **5,6** of setting device **4,5,6** rotate about wobbler **1c,3** at parallel locations relative to the axis of rotation, thus constituting a parallel-kinematic machine) wherein the wobbler **1c,3** includes an external bearing mounting surface or an

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external bearing surface (the bearing mounting surface or bearing surface receiving setting-device bearing means **9,11,12**) on which the setting device **4,5** is mounted (Figure 2).

Conclusion

The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure. The following patents show the state of the art with respect to machine joints:

Fiora (US 6,014,909), Fournet-Fayard et al. (US 5,486,174), Soderberg (US 4,785,528) and Neumann (US 4,732,525) are cited for pertaining to joints comprising a wobbler and a setting-device bearing means.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to MICHAEL P. FERGUSON whose telephone number is (571)272-7081. The examiner can normally be reached on M-F (6:30am-3:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Daniel P. Stodola can be reached on (571)272-7087. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MPF
06/05/08

/Michael P. Ferguson/
Primary Examiner, Art Unit 3679